

I Claim:

1. A pivot connection for connecting the wand of a vacuum cleaner hose to a vacuum cleaner nozzle of the type having an exhaust aperture through which air is drawn into a vacuum hose, the pivot connection comprising:

a hollow arcuate duct having a lower end adapted to be secured to a top surface of the nozzle to surround its exhaust aperture and having an open top end disposed in an angular plane with respect to a vertical axis, and an interior in air flow communication with the exhaust aperture and forming an arcuate extension thereof; and

a hollow tubular hose connector member having a lower end pivotally mounted in said duct and a central longitudinal bore adapted to receive and engage a tubular wand attached to one end of a vacuum hose, said hose connector lower end configured to engage said duct interior in a sliding air-sealing relation; wherein

said hose connector is pivotal in a vertical plane about a horizontal axis between a lowermost position and an uppermost position relative to the nozzle and said duct.

2. The pivot connection according to claim 1, wherein

said duct open end is disposed in an angular plane at an angle of about 30° with respect to a vertical axis.

3. The pivot connection according to claim 1, wherein

said duct comprises a three-sided curved duct having a transverse generally rectangular cross section with a curved front wall and contiguous laterally opposed side walls having lower portions surrounding the exhaust aperture on three sides, upper ends defining a generally rectangular said open end disposed in an angular plane with respect to a vertical axis, and interior surfaces forming said arcuate extension of the exhaust aperture.

4. The pivot connection according to claim 3, wherein

said hose connector member has an elongate tubular portion with a generally rectangular flange at said lower end sized and shaped to engage said duct interior surfaces in a sliding air-sealing relation.

5. The pivot connection according to claim 4, wherein

said hose connector member rectangular flange at said lower end is sized and shaped to engage said duct interior surfaces in a sliding air-sealing relation, and has a central longitudinal bore tapered slightly inward along its length toward its said lower end dimensioned to receive and frictionally engage the tubular wand attached to one end of the vacuum hose.

6. The pivot connection according to claim 4, further comprising:

a backstop member adapted to be secured adjacent to said duct rectangular open end, and having a stop surface configured to engage said tubular portion of said hose connector in its said lowermost pivoted position whereby said flange remains within said duct interior.

7. The pivot connection according to claim 3, wherein

said duct open end is disposed in an angular plane at an angle of about 30° with respect to a vertical axis; and

said hose connector member has an elongate tubular portion with a generally rectangular flange at said lower end extending outward a short distance from the tubular portion disposed in an angular plane at an angle of approximately 60° with respect to a longitudinal axis of the tubular portion.

8. The pivot connection according to claim 3, further comprising:

a rod-like protrusion extending transversely along a back edge of one side of said rectangular flange adapted to be rotatably received in a recess extending transversely between a lower end of said duct laterally opposed side walls.

9. The pivot connection according to claim 3, wherein

said hose connector member has an elongate tubular portion with a generally rectangular flange at said lower end sized and shaped to engage said duct interior surfaces in a sliding air-sealing relation, one side of said flange pivotally mounted at a lower end of said duct; and

said hose connector member has an angular bottom end extending downwardly a distance below said flange sized and shape to engage a floor surface when said hose connector member is in its said uppermost pivoted position to be used as a scraper for dislodging debris and substances that may be adhered to the floor surface.

10. A vacuum cleaner nozzle for attachment to a wand at one end of a vacuum hose, comprising:

a main body portion having a top surface, a bottom surface and an outer periphery, a central exhaust aperture through which air is drawn into the vacuum hose, and spacer means on said bottom surface adapted to be supported on a surface to be cleaned and sized to position said bottom surface a predetermined height above the surface to be cleaned;

a hollow arcuate duct having a lower end secured to said main body top surface surrounding its said exhaust aperture, an interior in air flow communication with said exhaust aperture and forming an arcuate extension thereof, and an open top end disposed in an angular plane with respect to a vertical axis; and

a hollow tubular hose connector member having a lower end pivotally mounted in said duct and a central longitudinal bore adapted to receive and engage a tubular wand attached to one end of the vacuum hose, said hose connector lower end configured to engage said duct interior in a sliding air-sealing relation; wherein

said hose connector is pivotal in a vertical plane about a horizontal axis between a lowermost position and an uppermost position relative to said main body portion and said duct, and said main body portion is disposed at a height above the surface to be cleaned to draw air between said surface to be cleaned and said bottom surface at a substantially uniform velocity proportional to the inflow velocity of air into the vacuum hose, and the static pressure of the air drawn between said surface to be cleaned and said bottom surface is approximately equal to the static pressure of the air above said main body portion.